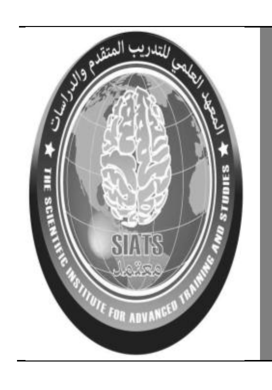


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Journal of Human Development and Education for specialized Research

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مجلة التنمية البشرية والتعليم للأبحاث التخصصية

العدد 4، المجلد 1 ، أكتوبر 2018م.

e ISSN 2462–1730

رأس المال الفكري في المؤسسات العربية ودوره في تطوير الأداء

Intellectual capital in the Arab Organizations and its role in the development of performance

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1439هـ -2018م

ARTICLE INFO

Article history:

Received 1/9/2017
Received in revised form 25/9/2017
Accepted 11/12/2017
Available online 15/10/2018
Keywords:
Insert keywords for your paper



Abstract:
The intellectual capital of the key resources that achieve the success and labor organizations to ensure its continuity and resilience in light of the changing economy and increased competition, which is characterized by the present era. It has achieved many of the communities made significant progress as a result of reliance on the capabilities and capacities of its member's creative and distinct structural origins and its relations with its customers. It has aimed by this paper at explaining the essence of Intellectual capital, Importance and its role in the Arab Organizations performance. This research aimed also to identify components of the intellectual capital and its roles and capabilities in the Arab Organizations. In addition, the current study discusses the ways of success the Arab intellectual capital in Arab institutions and propose a road map to enhance the intellectual capital in the Arab countries. In conclusion, the research suggest many recommendations that contribute to the performance and development in the Arab institutions to invest the head of the Arab intellectual capita.

Keywords: Intellectual capital, the Arab organizations performance.



الملخص:

رأس المال الفكري في المؤسسات العربية ودوره في تطوير الأداء

يعتبر رأس المال الفكري من الموارد الرئيسية التي تحقق لمنظمات العمل النجاح وتضمن لها الاستمرارية والصمود في ظل الاقتصاد المتغير والمنافسة المتزايدة التي يتميز به عصرنا الحالي. ولقد حققت العديد من المجتمعات تقدماً كبيراً نتيجة لاعتمادها على طاقات وقدرات أفرادها الإبداعية وبأصولها الهيكلية المتميزة وبعلاقاتها مع زبائنها. يهدف البحث في مجمله إلى تبيان ماهيّة رأس المال الفكري وأهميته ودوره في إطار الأداء في المؤسسات العربية، كما تهدف هذه الورقة للتعرف على مكونات رأس المال الفكري ودراسة واقع رأس المال الفكري العربي، كما يسعى البحث للوقوف على التحديات والإشكاليات التي تواجهها الدول العربية في نظرتها واستثمارها في رأس المال الفكري، إضافة إلى أن الدراسة تناقش كذلك سبل نجاح رأس المال الفكري العربي في المؤسسات العربية وتقترح خارطة طريق يمكن من خلالها تعزيز رأس المال الفكري في الدول العربية. وفي الختام يقدم البحث العديد من التوصيات التي تساهم في تطوير الأداء في المؤسسات العربية لاستثمار رأس المال الفكري العربي.



Introduction:

Intellectual capital is one of the basic resources of the modern economy, "knowledge economy" and is considered one of the most assets and assets value and importance in the modern era because they are scientific sources that are able to enter the vital changes in the work of the organizations as well as the ability of those elements to add new values to the institutions that they work for.

The big challenge faced by the administration of the institutions is the extent of their ability to prepare the intellectual capital and to create and stimulate its productivity (Anzi, 2009), So Crema & Verano, (2014) pointed out to the great importance of intellectual capital at all levels for institutions and countries.

Efforts are concentrated in most countries of the world to invest in intangible assets especially the Intellectual Capital to achieve the expected performance and more, through attracting rehabilitant, training and guiding the brains in the fields of research, development, creativity and innovation.

We point here to the famous Marshal saying: The most valuable forms of capital is invested in human as the skills of spirits renew with era changes and will disappear only by the end of age. So, it's not subject to the law of diminishing utility, which applies to material goods (Salem, 2009).

Accordingly, the developments and changes in organizations have led to a shift from a focus on funds which is the most important assets in the organization, to that the knowledge is the most important and greatest input to the success of the organization (Al - Azzawi, 2008). The intellectual capital's various components have an important role in the success of the organizations at the present time, as it distinguishes organizations that can provide new products, better with providing innovations for their products and services at a rapid rate, and confirms the results of survey of the heads of management of large - sized organizations in the United States of America, who emphasized that the intellectual capital, is the most important asset, and it is the basis of success in the twentieth century. (Wiig, 1997). (Al-Azzawi, Janabi, 2011).

In a survey of the heads of 95 British organizations, there was a significant degree of agreement among the chairpersons in recognizing the importance of various intangible resources for the success of their organizations Hall, 1992). One author says that managers are becoming increasingly aware that the continuity and success of the organization depend on its ability to compete and the strength of performance



with respect to the intellectual capital, knowledge - based assets, as well as the extent of the ability to take advantage of those assets in its operating activities (Wiig, 1997), And (Stewart, 2004)

It is worth noting that human capital - as one of the most important elements of intellectual capital - is more important than any other material assets owned by organizations, which means the necessity to provide adequate information on available human resources to enable the management of these organizations to make use of them. , Yalama & Coskun (2007), (Omari, 2008), (Kubaisi, 2009), Mondal & Ghosh (2013)

Many developed countries have spent billions of dollars to invest in the intellectual capital and led to a large gap between them and the developing countries , especially in most of the industrial, developmental and technological fields, and these developing countries are the Arab countries, To emphasize the importance of intellectual capital, it is enough to refer to the final budget of Microsoft Computer Technology, which showed that the market value of the assets of the company is estimated at 110 billion US dollars, and that its capital is only 10% of its total market value, 90% is its human capital and immaterial assets. This is what the company insists on keeping.

This is demonstrated by global human development and competitiveness indicators produced annually by United Nations organizations. In the Arab world, the investment on the intellectual capital faces many hinders such as: lack of coordination, the absence of legislation regulating the industry and management of knowledge, distortion of the educational pyramid, limited spending on research and development, creativity and innovation, brain drain, protection of intellectual property rights, and lack of justice and equal opportunity.

Based on the above, the current Arab institutions have to foster the intellectual capital if they want to achieve progress progress in the era of globalization, as well as to focus on developing the intellectual capital to achieve the performance of institutions, whether at the level of the product or service quality or at the level of cost and price or the other excellence strategies. Therefore, this paper is divided into several themes dealt with the issue of intellectual capital in the Arab world challenges and solutions and their impact on the performance of institutions.



Search elements:

In order to address this issue and to cover its aspects, we have decided to divide the study according to the following plan:

A general introduction that includes the research problem, its importance and its objectives.

1. What is intellectual capital and what are its dimensions.
2. The benefits of interest in intellectual capital and its importance
3. intellectual capital components
4. the reality of the Arabian intellectual capital
5. the challenges facing investment in the Arab intellectual capital
6. A roadmap for investing in Arab intellectual capital
7. Conclusion of the main findings and recommendations of the research.

1. The concept of intellectual capital and its dimensions:

1.1 The concept of intellectual capital

The term intellectual capital was first used in 1958, when financial analysts pointed out in the context of evaluating stock market for many of the approved small businesses in their work on science, and pointed out that the work of evaluating the stocks could be called the intellectual premium.

The idea remained dormant till Walter Wriston, a former head of the Bank of Citicorp the largest US banks, said that his bank and other organizations had a financial intellectual capital value that couldn’t be measured by the accountants (Sterot, 2004).

Thus, that was the beginning of the use of this term, and the interest to know this concept increased. The intellectual capital refers to the concept of intensive relations based on synthetic knowledge, and competencies that have the potential to generate value and development.

Although the use of the term intellectual capital was since the 1958, it was only formed as a concept by the year 1969 credited to the economic JKGalbraith, then the concept was activated and expanded by the thinker Peter Dracker in 1993, and since then definitions and views on the concept of intellectual capital were formed successively.



Usually, the intellectual capital has various names such as: the knowledge capital, and the intangible capital or the ethereal assets (Anzi, 2009).

In short, the intellectual capital is the real wealth of knowledge, which is a compacted wealth if it is not used in an ideal way and not managed within the assets and the intangible assets.

And we will address here a list of the most important definitions: the Organization for Economic Cooperation and Development (OECD) has defined it as " the economic value of two categories of intangible assets: the organizational capital (structural) and the human capital of the organization."

Stewart sees it as: "knowledge emerging into the application and invested for the benefit of the organization because knowledge is a competitive nuclear weapons in our time". It has also been defined by the study of (Rizk, Mahmoud, 2007) as a knowledge capital and is the intangible assets owned by the company or institution related to knowledge, which is expected to be used to achieve continuous benefits and to generate and to develop the wealth. The study of (Huafang, 2008) indicates that intellectual capital is the difference between the pure value of tangible assets and the market value. The study of (Mursi &Sawsan, 2008) defines it as a group of knowledge and unique assets based on: the human creative brains, the requirements, work systems, the relationship with customers that leads to continuous production of new ideas and methods that achieve added value to the organization and supports its competitiveness.

One of the researchers (Karabay, 2011: 243) sees that the intellectual capital could be:

- Organizational knowledge as well as knowledge industry.
- Ability to apply skills in the most difficult situations.
- Knowledge gained through training and experience.
- The system used to understand situations and effects.
- Knowledge is how business is managed.
- Knowledge used to avoid pitfalls.
- Knowledge is how to find information and how to get it.

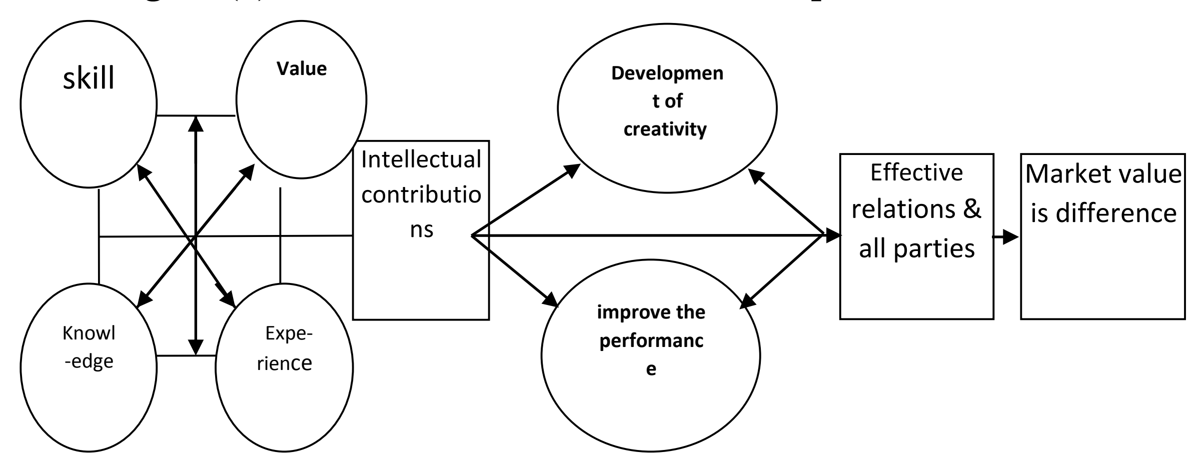


The following definition developed by the study of Mention(2012: 3) who believes that "the intellectual capital is the group of the available skills in the organization with extensive knowledge that makes it able to make a global organization by responding to customer requirements and the opportunities offered by the technology.

The researcher concluded to a simplified definition of intellectual capital, which is “every intangible asset that can be measured, expressed and ideally activated to contribute to increasing the final outputs or the performance of the establishment”.

In light of the above concepts, it is clear that intellectual capital is a mental ability that is able to generate ideas for creative and strategic development that ensures the distinguished performance of the organization in a rapid changing work environment.

Figure (1) on the definition of intellectual capital



- Sources Anzi and Saleh, (2009, P 0.171).

From the previous figure (1), it is clear that intellectual capital is a group of employees who have mental capabilities, which elements are (knowledge, skill, experience, values) that could be activated and invested in increasing the intellectual contributions, to improve the performance of the Organization 's processes and to develop of creativity space in achieving its effective relationships with all parties involved, and makes their market value difference from their book value significant.

1.2 Intellectual Capital Dimensions

Through the previous concepts of intellectual capital, and as both (Quinn) and (Rastogi) and (Yogesho) and (Kelly) - as well as former writers and researchers -



agree, that the main dimensions of the intellectual capital are summarized and shown in Table 1 below:

Table.1: Main dimensions of intellectual capital.

Attracting intellectual capital	These dimensions focus on:	- Search for advanced expertise. - attracting technical skills. - availability of information systems to ease attraction
Intellectual Capital Industry		- Strengthening capabilities individual's workers. - Reduce the opposition between individuals. - Creating intellectual spun.
Activation of intellectual capital		- Use the brainstorming with the workers. - Encouraging group's spirits. - Interesting with opinions workers.
Preservation of intellectual capital		- Continuation of training and development. - Financial and spiritual support. - Reducing organizational alienation opportunities
Attention to customers		- Documentation of the requirements of customers. - Availability information system to provide the service to the customer. - Seeking to retain the old customers

* Source: periodic benefit (2009)

2. The benefits of concerning with the intellectual capital and its importance

2.1 Intellectual Capital features

The Capital Intellectual ha a group of characteristics, (Amiri Ghalibi, 2004):

- Intangible capital: knowledge whether at heads laborers or at the organizational structure is invisible
- Difficult to be measured accurately
- Could be lost quickly.
- Growing when used: when the knowledge is used and activated, this leads to discovering more knowledges.
- Could be benefited from within different stages at the same time
- Incarnate at people who are ready to carry it.
- It has a big influence on the organization

What distinguishes the intellectual assets from the materialistic assets could be explained through the table (2)

Table 2: shows a comparison between materialistic capital and intellectual capital

Statement	materialistic capital	Intellectual capital
Basic Feature	Tangible material	Immaterial –intangible
Location of presence	Within the internal environment of the Organization	In the minds of individuals working in the organization
Model representation	Machine, equipment, buildings	Individuals with knowledge and experience
the value	Decreasing by extinction	Increasing by innovation



Wealth creation pattern	Physical use	Focusing, attention and broad imagination
Users	Muscle work	Cognitive work
Operational reality	It stops when problems occur	It burns when problems occur
Time	It has a productive life and decreases in energy	It has no age - increasing at creative abilities

- Source: Najm (2010).

2.2 The benefits of concerning with the intellectual capital

The importance of intellectual capital stems from the fact that it represents a competitive advantage for the organization, especially as organizations compete today based on the knowledge, information and skills they have. Therefore, giving it an attention is an inevitable issue imposed by the nature of the modern scientific and technological challenge (Ghen, et al, 2004: 5) , And there are many benefits that could be gained by any organization through attention to the intellectual capital, because it leads to the following (Hamdani and Ali 2010; Al Shukrgi and Mahmoud, 2010: 8):

- Increase creative ability.
- Impress and attract customers and enhance their loyalty.
- Promote time competition by offering more new or evolving products, and reducing the time between each innovation and the next.
- Reduce costs and affordability at competitive prices.
- Improving productivity.
- Enhancing competitiveness.

In the light of those benefits, the researchers see that the intellectual capital is one of the most valuable asset in the 21st century, because it represents scientific forces that are capable of making fundamental adjustments to everything in the work of organizations, as well as it has become the most important indicator that reflects the



evolution of management thought. It is one of the most successful leadership practices in the administrative institutions of different majors, and it is the best strategy to invest a distinguished category in the community according to knowledge and skills.

2.3 The importance of intellectual capital for organizations

Intellectual capital in the modern economy has become the most important asset in the organizations and the most competitive weapon of the organizations, which is in the minds of the workers and represented by the loyalty of the customers whom served by the organization and learn from them, and in the value of the trademark and patents.

An organization with the intellectual capital has the capacity to maintain an excellent level of knowledge within the organization and to support the scientific use of information, thereby enhancing organizational performance and the best capacity to adapt to the competitive environment. (Choopani & Ehtesham, 2016)

The importance of intellectual capital represents a competitive advantage for the organization because today's organizations compete on the basis of knowledge, information and skills that they have which is a fundamental resource for the competitive advantage, as well, the intellectual capital is the most important sources of the organizations' wealth and therefore a significant indicator of excellence institutions in their performance. The interest on it is the cause of the inevitability imposed by the nature of the contemporary scientific and technological challenge. It's enough to know that IBM Company receives more than one billion dollars annually of full returns because of the patent, and the cost of investment in intellectual capital is high and is justified because the sustainability of organizations depends on it. (Mardani & Daghbandan, 2016)

Organizations may encounter one of the following problems or all if they don't have an appropriate strategy to maintain the capital (Abdullah, 2004):

- Intellectual capital may affect so the real value of its thoughts and productivity becomes nothing. Which leads to reduction of the market value of the organization.
- Intellectual capital may migrate to other organizations or Countries. This is dangerous because these people have information which make

serious threats for their previous organizations and strength points for the new organization they migrate to.

- Intellectual capital may hamper the plans of the organization, especially when their needs and wishes are not acknowledged.

Fourth: the impact of intellectual capital in the value of organizations:

The organization's ability depends on transforming intellectual capital into a value, and also depends on the quality of the value that the organization wishes to achieve its investment in intellectual capital, which can take several forms. There are also many types of values that the organizations aim to form in the reality, as summarized in Table (3).

Table 3: forms of intellectual capital investments and types of the organizations' targeted values

Forms of intellectual capital investments	Types of the organizations' targeted values
• Achieving profits. • Achieving competitiveness feature through increasing creative and innovative abilities • Enhancing relations between customers and suppliers. • Enhancing productivity and reducing cost • Enhancing staff's attitudes and the external intellectual image	• Protecting products and services achieved from the innovations of the organization and attempting to own the innovations of competitors. • Creating standards at markets or for new products • Determining a basis For new alliances • Creating baffles against new Competitors



• Increasing the market quota and building a strong competitive center.	

- Source: Saleh (2009).

3. Intellectual capital components

Edvinsson and Malone, (1997) identify two main components of intellectual capital of the organizations:

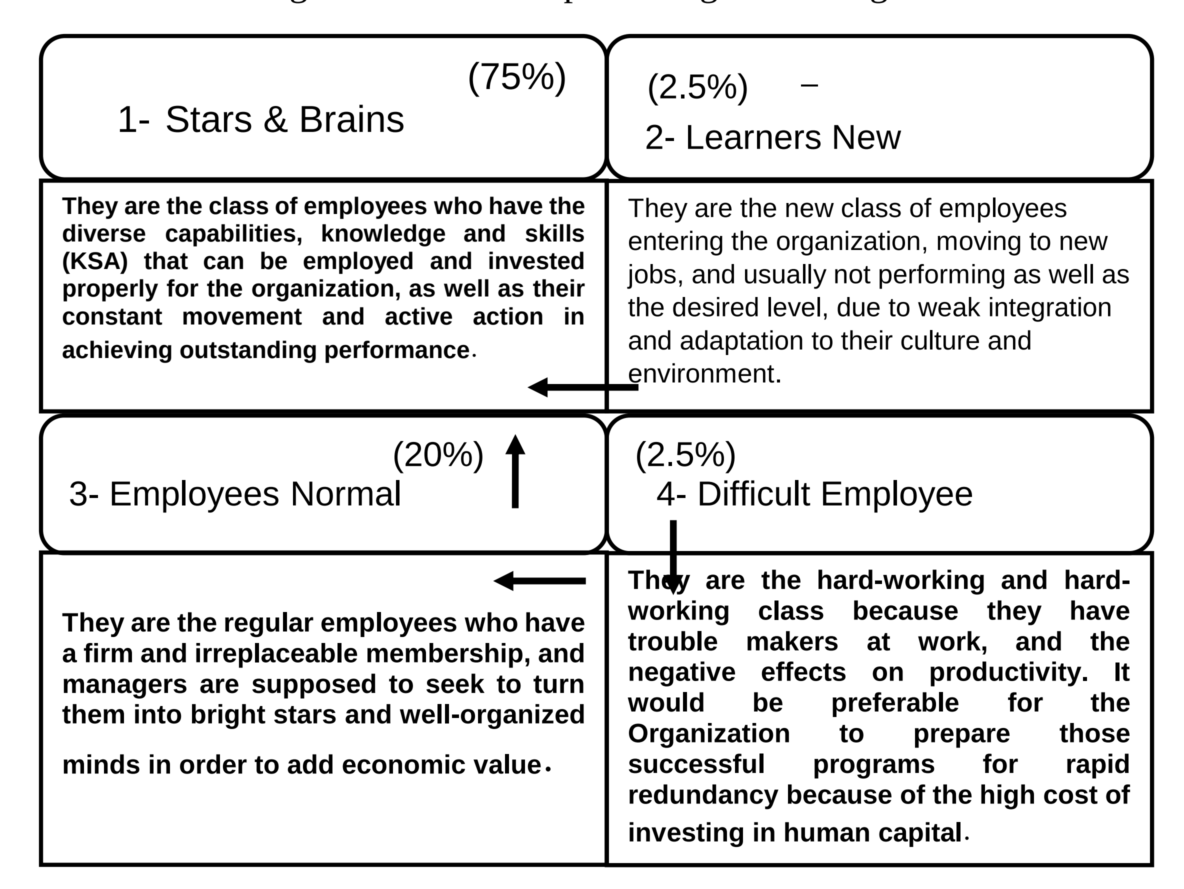
3.1 Human Capital

It includes knowledge, skill and human ability that can be successfully invested. This knowledge and experience should be core and rare and difficult for other organizations to imitate, as these specifications of human capital, especially when measured and accurately determine will add a value to the organization. In addition, its measurement process will assist the organization in determining the degree of contribution to the realized value of the organization (Johnson, Scholes and Whittington, 2010). Alaniz (2009) mentions an important classification of the human capital. He classified them into 4 categories. The first box of figure 2 is the excellence category who should be 75% of the total staff. These should be as lighting stars and the arrangers whom are difficult to be replaced by the organization.

The second category represented by the second box are the new educated workers, who are in the process of learning to gain knowledge and experience by being appointed for the first time, transferred or promoted to other jobs, preferably the proportion is about (2.5%) and taking into account the speed at operating the transfer of knowledge and not losing time. The third box represents the normal workers in their performance and behavior. Their proportion should be 20% and the organization can transfer them to the first box if it wishes. The fourth category is the group of difficult employees whom should be quickly replaced as they hinders against the improvement and they cause losing profits. They shouldn’t be more than 2.5%.



Figure 2: Human Capital categories in organizations



- Source: Alanazi (2009.233)

3.2 Structural Capital

It includes all the infrastructure, operations, systems, software, innovations, trademarks, and information systems in addition to the reputation of the organization. It could be classified into two types:

- Organizational capital
- Customer capital

* Organizational Capital

It refers to the processes and innovations and all intangible assets owned by the Organization (Intellectual Property)

* Customer Capital

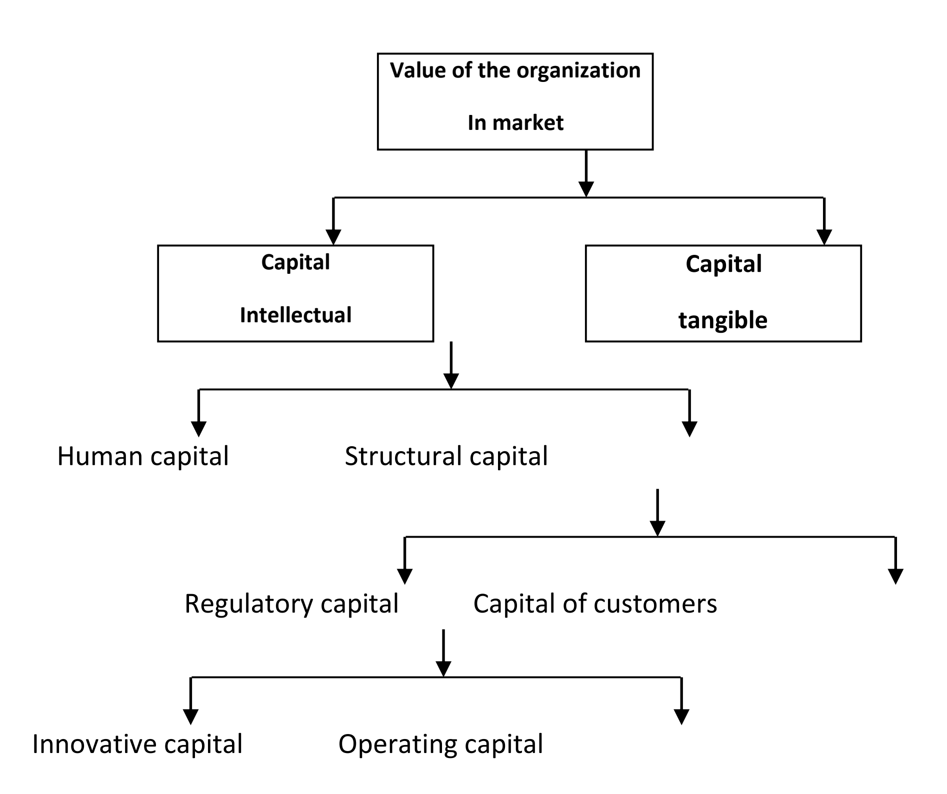
Some researchers have called customer capital as Relational Capital. As the customer capital refers to the financial capacity of the clients and their



communication with the organization and loyalty and the degree of satisfaction with them.

The following diagram illustrates the model Edvisson and Malone (1997).

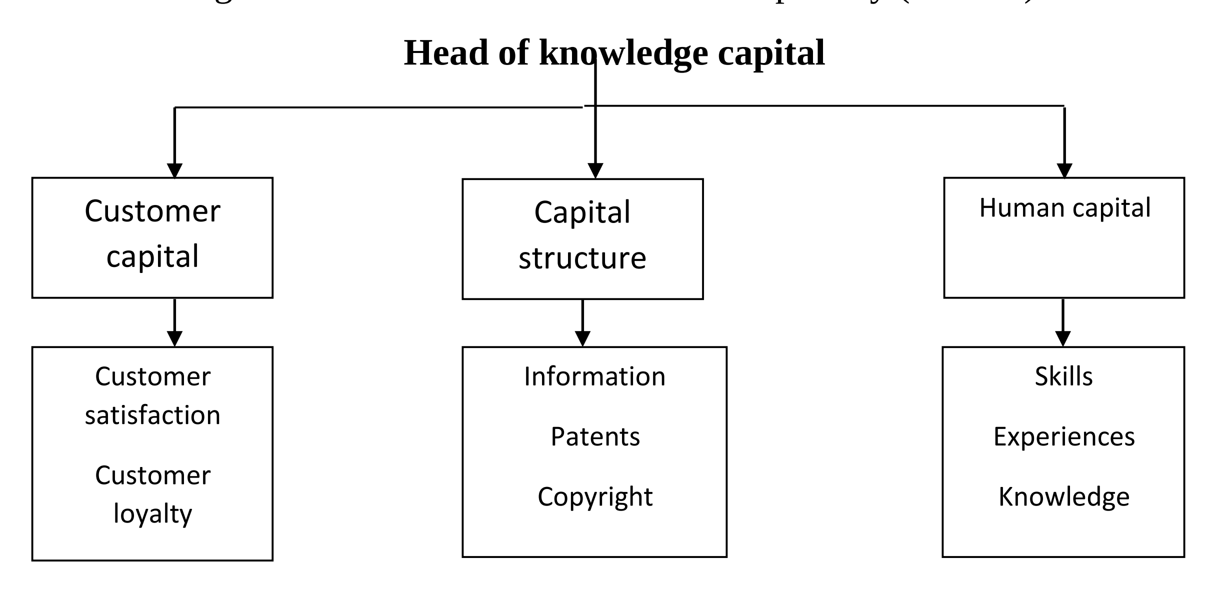
Form (3): intellectual capital of the organization components



The model in Figure (3) above indicates the importance of intellectual capital to create or add value to the organization as the organization's market value can rise through the high value of intellectual capital, which also affects the style and how the materialistic capital is invested. This is what was confirmed by Roost, Pike and Firestorm, 2005. So some researchers focused in their definitions of capital intellectual as intellectual and knowledge resources, information and expertise that can be used to produce intellectual property and to create wealth and prosperity for the society As we should not neglect here to refer to the division of (Stewart): which is the most common division based on the literature of the intellectual capital, shown in Figure No. 4 below:



Figure 4: the divisions of intellectual capital by (Stewart)



* Source: Hussein (2008, 133)

From Figure No. (4)

First: Human Capital: knowledge is owned and generated by individuals and employees and includes skills, expertise and innovations. From that, the most important aspects that the organization should concern with to develop its human capital are:

- Attracting the best human talent, i.e., that the organization can be an effective system in the selection process, testing and use of new workers and provide the foundations of learning and the transfer of experience between successive generations of workers.
- Enriching human capital, and this is done by encouraging employees and motivate them to join training programs, and knowledge sharing, acquisition and distribution within the company.
- Maintaining outstanding employees, by providing systems and methods based on confidence and encouraging creativity and new ideas.
- Creating a learning environment. The cognitive organizations' capital is in the minds of employees who leave the company at the end of the



day, who can luring other competitors, and therefore must be found to strengthen the foundations of the organizational loyalty rules.

Second: Structural Capital: represents the knowledge that is acquired and retained in structures, systems and procedures of the organization (The organizational capabilities of the organization), which remains in the organization after turning off its assets at the end of the work.

Third: Customer Capital: represents the knowledge that derives a greater value from the satisfied customers with permanent loyalty, suppliers whom are relied on and from other external sources.

The difference is clear between the model of Edvisson and Malone, 1997 and the model of Stewart as the first considers the customer capital is separated and is considered as one of the key components of intellectual capital, unlike Edvisson who believes that the structural capital is only the second component of the intellectual capital from which the customer and the organizational capitals are branched. The researchers see that there is a great similarity between the two models, despite the different divisions they have.

4. The reality of the Arab intellectual capital

The researchers do not want to indicate to all the international, regional and Arab reports on the brain migration in general and minds of Arab , in particular, because it will take a large area of pain and anguish, but confine ourselves with reference to the simple readings may give many indications. The first reading was published in Arab states League report, which indicates that the Arab world alone contributes more than 31% of the brain migration from developing countries, which represent 50% of doctors and 33% of engineers and 15% of scientists in various scientific disciplines. The report also indicates that 54% of Arab students studying abroad preferred to stay in their places of study (Al - Naimi etal, 2008). The internal migration within the country, especially the transition from the public sector to the private sector in the Arab countries in general and the Cooperation Council for the Arab Gulf States in particular - although some reduces the effects compared to foreign immigration - they constitute an obstacle to the success of education policies and affect the accuracy of the results of the labor force plans, in addition to the high cost incurred by the sector as a result of government spending, whether in education or rehabilitation or training. According to the paper submitted by the Institute of



Public Administration in the Kingdom of Saudi Arabia, which estimates the cost of training in the Arab world by about $ 250 billion a year, and the paper emphasized that the Kingdom alone paid about SR two billion Saudi Rials annually on the training activity (Al – Naimi; et al: 2008)

The report of the Arab Human Development Reports (AHDR) - United Nations Development Program (2016), indicate that migrants and job seekers and learning form 22% of immigrants and most of them are young people with high skills, while the proportion of immigrants who have completed their university studies is 26.1 % searching for job opportunities. The report says that the number has dramatically increased after the events of the Arab spring in 2011.

If we look at the United Nations reports about human development from 2010 to 2015, the human development indicators of the development and concerning with the intellectual capital are not developing, however, only the Arab Gulf states are among the top fifty countries around the world, but most of the Arab countries are unfortunately at the bottom of the list in regards with concerning with the intellectual capital.http://ar.actualitix.com/country/wld/ar-human-development-index-by-country.php (2016).

There are significant challenges stand in the face of Arab politics as the rising unemployment problem due to the bad economic conditions as well the increase in poverty and hunger ratio because of the current wars in the Arab countries, such as the war in Syria, Yemen, Iraq, and Palestinian. In addition, we find the administrative corruption in the service and other institutions in the Arab world as well as the absence of human rights in some Arab countries. As we mentioned before, some of those distinguished minds find a warm welcome in the developed countries. (Cairo Center for Human Rights, 2016).

Overall, we conclude to say that despite the awareness of Arab thought of the importance of the development of the Arab administrative environment through the adoption of new management ideas, and despite the serious attempts made for the application of some of these new ideas and concepts in management but that does not negate the fact that the difficulty of the Arab environment and the lack of appropriateness of the adoption of many of these ideas to invest in the intellectual capital.



5. The challenges facing investment in the Arab intellectual capital

5.1 The real challenges in the Arab intellectual capital

In order to draw a road map for investment in the Arab intellectual capital and setting the development of strategies and policies that regulate this investment, there must be a strategic analysis to identify strengths and weaknesses in the internal environment and opportunities and threats in the external environment. Analyzing the reality of the intellectual capital, previously, indicated points of strengths and opportunities which are as follows:

1. Remarkable increase in learning ratios (literacy).
2. Increased demand for university education.
3. Demographic opportunity (high) proportion of young people.
4. A common language, one religion and close cultures.
5. Diversity of climate and natural resources.
6. Integration between materialistic capital and human capital.
7. Wide spread of information technology and communications.
8. Marked improvement in policies and programs related to women's empowerment.

It can be said that the weaknesses and threats form challenges facing investment in the Arab intellectual capital, and these challenges tabs have been classified into components (elements) of intellectual capital as follows (the regional report of UNESCO, 2015 and Bontis, 2004 , Gruiain, 2011 and slaves, 2012):

(A) Human capital.

1. Limited political, intellectual and academic freedoms.
2. Lack of capacity of education institutions (public and higher) to accommodate the growing numbers of students.
3. The lack of justice and equality of educational opportunities.
4. A clear lack of skilled labor.



5. Most of the plans and programs of training and continuing education are unguided.
6. Weak demand for technical education (distort the educational pyramid).
7. Focusing on the quantity without qualitatively different levels and educational programs.
8. Low government spending on public education and higher education.
9. The increase in poverty and unemployment in most Arab countries.
10. Great variation in human development indicators.

(B) Market capital.

11. Higher taxes in most Arab countries, where the percentage reached in some countries 30%.
12. Increase of the gap between education outputs and the requirements and needs of the labor market.
13. Scarcity of two-way investment and cross-border.
14. Openness to multiple and mastery of foreign languages cultures.
15. Enhance trust and confidence and teamwork in business.
16. Absorb the phenomenon of globalization and take advantage of the positives.
17. The lack of balance between exports and imports in the industrial and service fields.
18. Lack of alliances, partnerships and trade agreements on the Arab and international levels.
19. Low participation in exhibitions, conferences and international awards.



(C) Operations capital.

20. Entrenching good governance (decentralization, institutional work, transparency and accountability).
21. Weakness of government efficiency in the implementation of and follow-up and evaluation of strategies, policies and processes.
22. Lack of necessary infrastructure availability, especially in rural areas.
23. The lack of funding for business and entrepreneurial institutions.
24. The difficulty of the establishment of companies or institutions at the local or the Arab level.
25. The weakness of the competitive business environment.
26. There are no clear grounds for the protection of intellectual property.

(D) Renewal capital.

27. Low spending on scientific research and development in the public and private sectors.
28. The growing phenomenon of Arab brains migration.
29. Low spending on higher education compared to the proportion of public education.
30. Decrease in the number of the Arab graduate students to foreign countries.
31. Decrease in the number of researchers and scientists compared to developed countries.
32. Poor coordination between the private sector and universities in the field of research and development.
33. Lack of published researches in international specialized areas.
34. Limited registered patent and trademark.

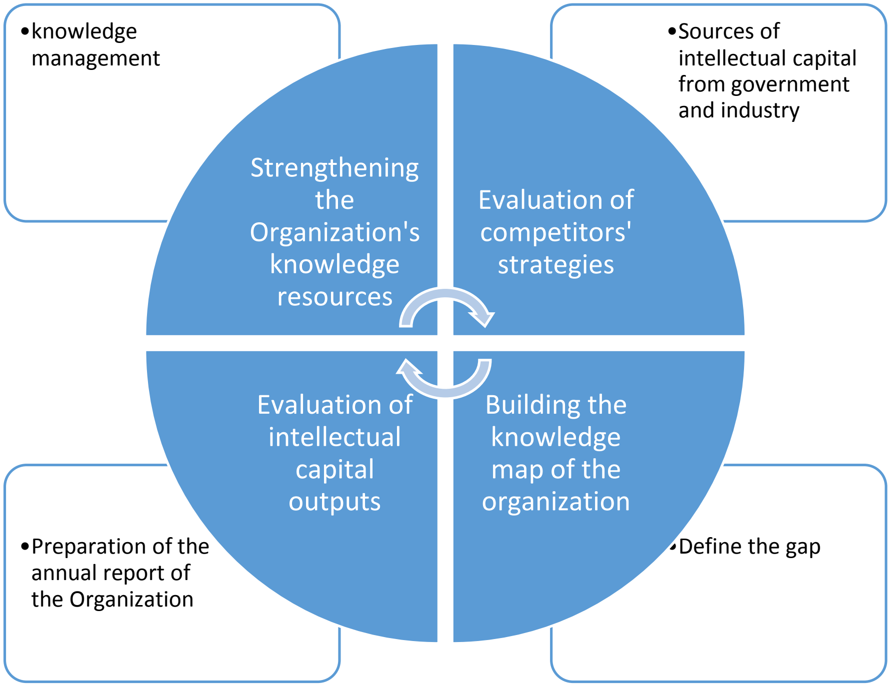


35. Decrease in the movement of authoring and copyright in the Arabic language.

5.2 professional procedures for the management of intellectual capital in the Arab world as a proposal.

We can use the scheme done by Bontis, N (1996) to determine the four procedures to develop the intellectual capital in the institutions and, therefore can formulate the following procedural steps as in Figure (5)

Figure (5): Intellectual Capital Management Procedures



- Source: Bontis, N. 1996: 40-47.

5.3 The impact of intellectual capital on the performance of organizations in achieving institutional innovation and excellence:

The adoption of creativity by companies is one of the basic concepts that plays a positive role on the level of the activity of the company and its life and continuity, especially at the present time, and in order to get to the institutional excellence every company must be creative in how to activate and attract the intellectual capital since



it is one of the most important factors to attain institutional innovation and excellence. This could be achieved through the following (Al Zayaydat, 2008)

- The interaction of each of the following elements: the cognitive, intellectual and technical experience, the creative thinking skills and the internal and external motivations for companies.
- Expand creative thinking at all levels of the company.
- Innovation and originality of the element of intellectual capital in the minds of staff and employees within the companies.

Therefore, researchers find that the intellectual capital has a creative impact on the performance of companies which may lead them to the institutional excellence over the various internal and external levels.

The researchers note the emergence of a limited interest in some Arab countries towards the launch of initiatives to bring about such new structures. Here are some examples:

- In Egypt: Mubarak City for Scientific Research and Technology Applications, Valley of Technology in Sinaa, and the program of technological incubators . .
- In the Arabian Gulf: King Abdul-Aziz City for Science and Technology in Saudi Arabia, the Internet City in Dubai, the Science Park in the United Arab Emirates, the Project of Technological incubators in Kuwait and the Knowledge Oasis in the Sultanate of Oman.
- Jordan: Cyber City.
- In Lebanon: Saint Joseph University Initiative " Berytech", the Technological Incubator project of the National Council for Scientific Research, and other initiatives led by institutions from the private sector that focus on information technology and on developing software's.



- Tunisia: National Project for incubators and the technological city (Qutb Al Ghazalah for communication technologies)
- Syria: Information Technology Incubator ICT BI
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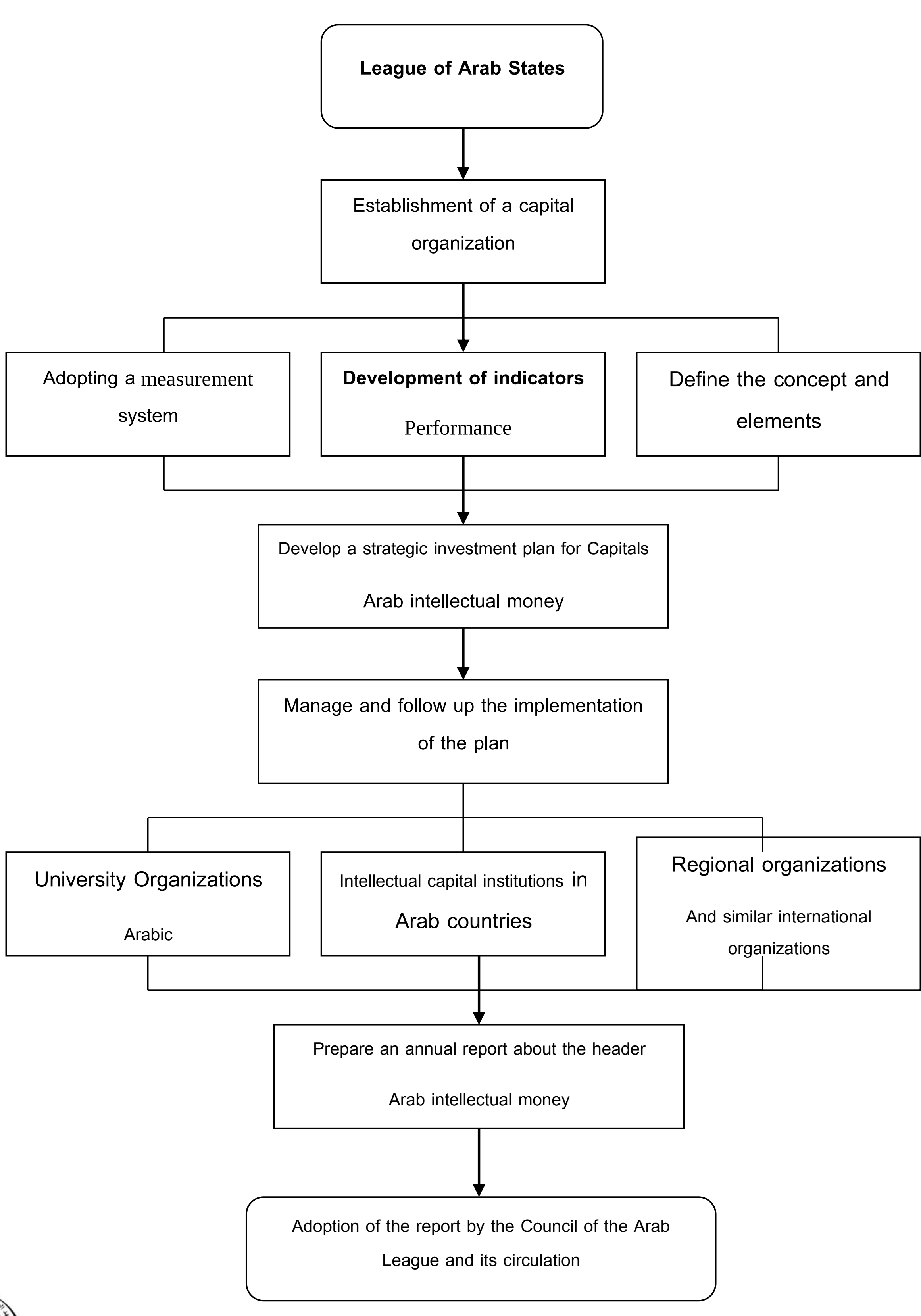
6. Road map to invest in the Arab intellectual capital

The road map could be defined as the path that has a beginning and end passing over stations that clarify its objectives, features, determinants and outputs. The importance of the proposed road map in this research is that it frames the collaborative Arab work in the field of investment in intellectual capital. It also establishes to strengthen coordination and competitiveness at all national, regional and international levels. To develop a road map at the regional level requires developing a road map at the national level.

A- A roadmap for investment in the head of the regional Arab intellectual capital.



Figure (6) a proposed roadmap for investment in the head of the Arab intellectual capital



(Figure 6) shows a proposed roadmap for investment in intellectual capital at the national level and includes the following features and limitations:

1. Establishing an organization an Arab intellectual capital organization by a decision of the Arab League.
2. The organization defines the concept and elements of the intellectual capital and the development of performance indicators for each component and, and then adopts a system or a mechanism to measure and evaluate each indicator.
3. Setting an Arab strategy plan for the investment in the intellectual capital for a period of five years that includes annual operational plans.
4. Coordination and cooperation with the following establishments in order to manage and follow up the implementation of the Strategic Plan:

- Intellectual capital institutions in Arab countries.
- Arab League organizations (the Arab Organization for Administrative Development, the Arab Thought Foundation, the Arab Labor Organization, the Federation of Arab Universities... etc.).
- Regional and international organizations concerned with human development, creativity, innovation, and intellectual and competitive property.

5. Prepare a report about the Arab intellectual capital that includes: data of all Arab countries, analysis and comparisons about the regional and international real situation of the Arab intellectual capital and recommendations to improve the investment in all the Arab intellectual capital elements.
6. Submission of the report to the Arab League Council, then approving and circulating it using all the available means.

(B) Through investment in the national intellectual capital map.

We suggest here a proposed roadmap for investment in intellectual capital at the national level that includes the following features and limitations:



1. Establishing an institution for the national intellectual capital by a decision from the Council of Ministers in each Arab country.
2. Setting a national plan for the investment in the national intellectual capital that copes with the Arab strategic plan with respect to the elements of intellectual capital and with the indicators of performance, the measurement mechanism and evaluation.
3. Including the investment plan in the relevant national strategic plans such as the strategic plans of: public education, technical education, higher education, scientific research, development, creativity, innovation, health, agriculture, information technology, communications.
4. Managing and following up the implementation of the national plan in coordination with the public and private sectors, universities, and scientific research and development centers.
5. Prepare an annual report about the national intellectual capital that includes achievements, failures and necessary recommendations to improve the investment.
6. Adoption of the report by the Council of Ministers.
7. Submission of the report to the Arab intellectual capital organization.



7. Conclusion:

The research found the following group of results:

1. The intellectual capital is a mentality ability which is capable of generating ideas for creative and strategic development, which ensures the survival of the organization in a rapidly changing work environment.
2. The intellectual capital is considered as the most important resource of wealth for the organizations, as it represents a competitive feature that contributes to an excellent and strong performance. Concerning with it is inevitability imposed by the nature of the contemporary scientific and technological challenge.
3. The best organization is the one that has the ability to be creative, and possess the ability to blow up the creative talents, and works on attracting and maintaining the intellectual capital.
4. The Arab countries have great challenges in investing the Arab intellectual capital, and that it is time to set priorities for the intellectual capital investment and work on developing it.
5. Access to the institutional performance and excellence requires passing through four basic procedures that should be implemented.
6. Arab intellectual capital could be invested. Hence, the increase in performance in the institutions, the reduction and the mitigation are the major challenges that face the investment in the intellectual capital in Arab countries.

Based on these results, the researchers provide the following set of recommendation:

1. Activating the concept of intellectual capital and the investment strategies in the intellectual capital, and making use of innovation and creativity incubators and disseminating them all over the governorates of the Arab world to achieve excellence and increase performance.



2. Highlighting the strategic role of modern management of the intellectual capital, and shedding light on the institutional culture and developing the loyalty of intellectual capital.
3. The necessity of activating the concepts of intellectual capital within the organizational structure of the Arab ministries and institutions as independent organizational units, and preparing strategic plans in order to accommodate the values and objectives of the intellectual capital and to benefit from the experiences of successful and leading international institutions.
4. The adoption of building a new strategy to invest in the intellectual capital in cooperation with governmental institutions, and adopting a system of intellectual investment values in the Arab world.
5. Conducting regular conferences and seminars held alternately in the Arab countries, developing an awareness culture of the capital, and involving various governmental sectors in the investment system in the intellectual capital.



Reference

- - Abdel-Moneim Oussama and Almtarneh, Abdel Wahab (2009) Intellectual Capital and its Impact on Creativity and Institutional Excellence in Jordanian Industrial Companies, Journal of Economic and Administrative Research, Faculty of Economic and Commercial Sciences and Management Sciences, Mohammed Khader University, Biskra, Algeria, December 06.
- - Abdullah, Laith Saad (2004) Role of Human Resources in Building a Responsive Learner Organization, International Conference on Knowledge Management in the Arab World, Zaytoonah University, Jordan, pp. 95-93.
- - Al-Anzi, Saad Ali, Saleh, Ahmed Ali (2009) Intellectual Capital Management in Business Organizations, Dar Al Yazouri Scientific Publishing and Distribution, Amman, Jordan.
- - Al-Douri, Zakaria Mutlaq and Saleh, Ahmed Ali (2009) Department of Empowerment and the Economics of Trust in Third Millennium Business Organizations, Dar Al-Yazouri Scientific Publishing and Distribution, Amman, Jordan.
- - Al-Hamdani, Nahida Ismail Abdullah, Ali, Akram Abdullah Ali (2010) "Intellectual Capital and its Impact on Personnel Performance Management An Analytical Study of the Views of a Sample of the Heads of Scientific Departments in Mosul University", Journal of Development of Rafidain, Volume 32, No. 89 , Faculty of Management and Economics, University of Mosul, Iraq.
- - Al-Rousan, Mahmoud, and Al-Jalwain Mahmoud (2010) The Impact of Intellectual Capital on Creativity in Jordanian Banks, A Field Study, Damascus University Journal of Economic and Legal Sciences, Vol 26, No. 2.
- - Amiri, Saleh Mahdi, and the majority, Taher Mohsen (2004), Knowledge Capital: The New Competitive Advantage of Business Organizations in the Digital Economy, International Conference on Knowledge Management in the Arab World, Zaytoonah University, Jordan, 2004.
- - Anzi, Saad Ali Hammoud (2001) Intellectual Capital: The True Wealth of Business Organizations of the 21st Century, Journal of Economic and Administrative Sciences, Vol. VIII, No. (22), Baghdad.
- - Cairo Center for Human Rights (2017). The fall of Barriers ... Human Rights in the Arab World: Annual Report 2016. Cairo: Cairo Center for Human Rights. (Http://www.cihrs.org/)
- - Hussein, Ajlan Hussein (2008) Knowledge Management Strategies in Business Organizations, Enrichment for Publishing and Distribution, Jordan.



- - Increases, Mohamed Awad (2008) Contemporary Trends in Knowledge Management, Dar Safa Publishing and Distribution, Amman, pp. 287-293.
- - Kubaisi, Salahuddin (2009) Knowledge Management: Publications of the Arab Organization for Administrative Development, Cairo, Egypt
- - Mursa, Sawsan Abdel Hamid (2008), "Intellectual Capital and Its Relation to Performance Efficiency in Egyptian Commercial Banks", Trade and Finance, Faculty of Commerce, Tanta University, No. 1.
- - Naimi Buraq, Khamis al-Kulibi, Mohammed al-Arimi (2008) Human Resources Strategy from Personnel Management to Talent Management in a Future Perspective, a working paper presented at the National Human Resources Strategy Seminar in the GCC States and the role of the institutes of public administration and administrative development in their implementation. , Institute of Public Administration, Muscat.
- - Najem, Aboud Najm (2010) Management of the Non-Landscape: Management of the immeasurable, Dar Al-Yazuri, Amman.
- - Omari, Ziad (2008). The study of the impact of knowledge management mechanisms and technology in the development of intellectual capital in the Jordanian industrial companies, PhD thesis in business administration, Amman University, Amman, Jordan.
- - Qashi, Dahir (2011) Intellectual Capital: Importance, Measurement and Disclosure, Fifth International Forum, Faculty of Economic and Commercial Sciences and Management Sciences, University of Chlef.
- - Rida Ibrahim Saleh (2009) Intellectual Capital and its Role in Achieving the Competitive Advantage of Organizations, a paper presented at the International Conference on Administrative Development: Towards Outstanding Performance in the Government Sector, Riyadh, Saudi Arabia, from 1-4 November.
- - Rizk, Mahmoud Abdel-Fattah, (2007) "Proposed Framework for Determining the Costs of Disclosure and Report on Knowledge Capital", Egyptian Journal of Commercial Studies, Faculty of Commerce, Mansoura University (No. 2).
- - Salem, Akram (2009): Intellectual Capital The Future Strategic Option, the main website of the Urban Dialogue Foundation, www.ahewar.org
- - Stuart, Thomas (2004) Knowledge Revolution, translation by Ola Saleh, International House for Cultural Investments, Egypt.
- (2005) "Measuring Intellectual Capital and its Impact on the Profitability of Banks", Tikrit Journal of Administrative and Economic Sciences, Faculty of Management and Economics, Tikrit University, Volume VI, Number 20.
- Al-Azzawi, Sami (2008) the Impact of Knowledge Capital on the Reasons of Strategic Success of Business Organizations: An Exploratory Study in



Jordanian Communications, 6th International Scientific Conference, Zarqa University, Zarqa, Jordan.

- Al-Azzawi, Sami, Al-Janabi, Hussein Mahmood (2011) The Relationship between Knowledge Management and Value Added: An Analytical Study of Jordanian Pharmaceutical Companies, Administrative Journal, Muscat, and Sultanate of Oman.
- Bontis,N.(1996). There's a price on your head: managing intellectual capital strategically, Business Quarterly,60(4),Summer 1996,40-47
- Choopani, Davood; Ehtesham, Ali (2016) Influence of intellectual capital components on financial performance of companies in food industries Journal Of Current Research In Science., Kuwait Chapter of Arabian Journal of Business and Management Review Vol. 5, No.5,, pp. 431-439
- Crema, M. and Verbano, C. (2014) "Managing Intellectual Capital in Italian Manufacturing SMEs", Creativity and Innovation Management. Doi: 10.1111/ claim. 12074.
- Ghen, Jin, Zhahuizhu & Yuanxie, (2004) "Measuring Intellectual Capital Anew Model and Empirical Study", Journal of Intellectual Capital, Vol., 5, No., 1.
- Gruian, C., (2011) "The Influence of Intellectual Capital on Romanian Companies' Financial Performance", Annales Universities Apulensis Series Economics, Vol., 13, No., 2.
- http://ar.actualitix.com/country/wld/en-human-development-index-by-country.php- Date of visit March 17, 2017 at 9:00 pm Mecca time
- http://en.unesco.org/gem-report/sites/gem report/files/regional_overview_AS_en.pdf, Date of visit March 17, 2017 at 9:00 Mecca time.
- Laperche, Blandine, (2005) "Knowledge Capital and Innovation in Global Corporations, EAEPE Conference, November, Bremen.
- Mardani, Vahid ; Daghbandan , Allahyar (2016)investigating the relationship between intellectual Capital and knowledge productivity in Iran Insurance branches in Guillen province-Iranز
- Mention, A.,(2012) "Intellectual Capital, Innovation and Performance: A Systematic Review of the Literature", Business and Economic Research. Vol., 2, No., 1.
- Mondal, Amitava, Ghosh, Santanu Kumar (2013) the Relevance of Intellectual Capital. Valuation: Indian Evidence, International Journal of Financial Management, Volume 3 Issue 2, pp. 1-9.
- Stewart, T. (1997), " Intellectual Capital: the New Wealth of Organizations", Doubleday Currency, New York.
- Stewart, T. A., (2010) "Measuring Company Intellectual Capital, Fortune.



- Xiao, Huafang, "Corporate Reporting of Intellectual Capital: Evidence from China", The Business Review, (Vol.11, No.1, 2008) Available From www.proquest.com.
- Yalama, Abdullah; Coskun, Metin (2007) Intellectual capital performance of quoted banks on the Istanbul stock exchange market, Journal of Intellectual Capital, Vol. 8, No. 2, pp. 256-271.

